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Complete List of Authors:	Hirayama, Megumi ; Raffles Medical Osaka Clinic Fernando, Senaka; Anglia Ruskin University, Faculty of Medical Science
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Introduction

Burnout has been recognised as a psychological response to work. The key characteristics of burnout are feelings of emotional exhaustion, depersonalisation, and reduced personal accomplishment. Over the past few decades, many studies have shown that burnout affects individuals-such as physicians, nurses and social workers-who work with care recipients with great emotional and physical needs.^{1,2}

However, at certain points throughout their careers, physicians tend to experience burnout to a greater extent than do their counterparts in the healthcare and social care sectors.² The high prevalence of physician burnout can be attributed to the fact that they are frequently overloaded by the quantity of medical care being delivered daily.^{2, 3} They are also under pressure to maintain high professional standards with limited organisational resources (e.g. staff) and

are likely to make mistakes that could negatively impact the safety of patients and the reputation of the medical profession. ^{2, 3} For instance, in the UK, the General Medical Council (GMC) defines professional of doctors and firmly and fairly deals with doctors whose fitness to practice is in doubt. However, this "fitness to practice investigation" by the GMC adds enormous stress to already burnt-out doctors. In fact, research shows that some doctors commit suicide when their GMC hearings process is undergoing.⁴

Among physicians, surgeons are more likely to experience burnout. For example, one-third of surgeons working in the National Health Service (NHS) experienced clinically significant psychiatric morbidity and/or burnout. Burnt-out surgeons feel an overwhelming sense of inescapable exhaustion and frustration and thus detach themselves from patients (emotional exhaustion). Such surgeons may also develop cynical attitudes towards patients, for instance, blaming patients for their medical problems or labelling using derogatory terms (cynicism). In addition, burnt-out surgeons tend to physically withdraw from work

through frequent absence or tardiness. Their loss of idealism and increasing rigidity cause a feeling of ineffectiveness (depersonalisation). Finally, their competence and productivity at work suffer, and they become dissatisfied with their level of accomplishment (reduced personal accomplishment) and may fantasize about or actually plan on leaving the profession.^{1, 2}

Effect of Burnout on Quality of medical care

In general, symptoms of burnout can (1) lead to the erosion of professionalism,

(2) affect the quality of care, (3) increase the risk of medical errors and (4) damage physician-patient relationships. For instance, Shanafelt et al. found a significant relationship between burnout and medical errors among American surgeons, whereas while Klein et al. showed that burnout is significantly associated with quality of healthcare provided by male surgeons in Germany. Burnout in physicians also strongly correlated with negative patient outcomes, such as lower satisfaction and prolonged recovery time. Moreover, burnout is

associated with psychiatric problems, such as problematic alcohol use and suicidal ideation, which have grave consequences for patient safety.⁵

Researchers in Canada proved that burnt-out physicians tend to decrease the productivity of healthcare services because of early retirement and shortened clinical hours for all physicians who have experienced burnout. These studies imply that burnout is a decisive factor in the quality of healthcare being provided by surgeons.

These examples indicate that healthcare organisations must decisively intervene to reduce burnout risk among surgeons, thereby improving the quality of healthcare they provide to patients. However, if they are to be effective, these interventions need to deal with contributors to burnout in surgeons, which can be divided into organisational and interpersonal contributors.

Organisational Contributors of Burnout

Across surgical specialties, burnout is associated with a number of organisational contributors. Heavy paperwork loads, health reforms, administrative demands, long working hours and on-call schedules are the strongest contributors to job stress and lowered wellbeing of surgeons. For example, a survey by the Royal College of Surgeons of Edinburgh shows that although UK-based surgeons support the new seven-day NHS contract intended to provide a round-the-clock, consultant-led service, this new service cannot be delivered given current staffing levels. ¹⁰ Consequently, such changes in the current surgical climate impose demanding conditions on surgeons, leading to increased job-related stress and burnout in surgeons. ⁵

Similarly, the number of on-call hours and nights logged is one of the most highly rated contributors to job-related stress. It also has a significant impact on surgeons, both professionally and personally. For instance, surgeons who work over 60 h per week and at least two nights on-call per week have a greater risk

of burnout, and younger surgeons show a higher risk of burnout than their older colleagues.¹¹

However, prior research indicates that lack of social support also contributes to burnout in surgeons. Social support is defined as 'information that leads individuals to believe that they are cared for and loved, esteemed, and values, and that they participate in a network of communication and mutual obligation'. Normally, support from organisations and supervisors is an important resource for preventing burnout. In particular, the lack of social support from supervisors and co-workers has a negative impact on young surgeons who need more support to cope with job demands, and the low level of social support is correlated with higher level of burnout. 1, 12

Interpersonal Contributors of Burnout

Most studies focusing on burnout in surgeons indicate that a key interpersonal contributor of burnout in surgeons is the work-home conflict. Although many surgeons believe they are more capable of managing work-home conflict than

their colleagues in other specialties, the very nature of their work does not allow enough time for personal and family life.¹¹ In particular, 60% of female physicians are more susceptible to burnout than male physicians, because of work- home conflict. If female physicians have children, they must take time off from work or reduce hours to accommodate their domestic responsibilities. Some female physicians struggle to maintain a balance between work and family and consequently suffer burnout.³

Organisational Interventions

Research has found that organisational intervention played a significant role in preventing and reducing burnout in surgeons.^{2, 13} Organisational intervention refers to organisations' efficiency in responding issues related to burnout.¹³ Organisations must develop a collective acknowledgement that burnout is present and view it as a legitimate issues that is worthy of attention. Healthcare organisations must collectively recognize and respond to burnout in surgeons.

Organisational interventions involve the modification of organisational practices and systems. For instance, work overload is an obvious, common cause of burnout, and the redesign of job contents and the work environment is essential for reducing work overload. Therefore, reform of patterns, such as reduction in working hours, should be proposed to facilitate the creation of additional time for personal and professional life and may significantly improve work-life balance. 14 Further, providing surgeons with flexible working conditions according to their needs and aspirations would reduce burnout and make surgeons less likely to leave practice. 15 Similarly, women who work reduced hours in medicine are able to balance their family life with their work schedules, reducing burnout risks.¹⁶ Moreover, reductions in clinical hours enhance the ability of surgeons to increase their productivity and maintain higher-quality performance, 14 as well as decrease the prevalence of serious medical errors.

A typical example of such intervention is the European Working Time Directive (EWTD), introduced in the UK as a health and safety legislation to protect

doctors from excessive work hours and on-call rota and to promote patient safety and reduce burnout.¹⁷ Although the EWTD has moderated burnout in surgeons, there is still a high prevalence of burnout in surgical trainees, who feel the pressure of acquiring technical expertise and medical knowledge and difficulty in balancing personal and work responsibilities under the new regulations. This implies that the duty-hour reduction alone does not reduce stress and burnout, therefore, it is necessary to improve the support system for surgical trainees and change the current learning environment.¹⁸ Here, senior surgeons have significant leadership roles to play, and research shows that involvement and support by leaders in surgery for such organisational interventions led to a greater likelihood of positive outcomes.¹⁹

However, in general, physicians are educated to be proficient doctors in clinical practice; they are not trained to be emotionally intelligent leaders with the ability to recognise emotions in others and channel their own emotions into behaviours that are appropriate for the situation, rather than withdrawing themselves into a

state of burnout. Indeed, there are several leadership-training programmes in the healthcare sector (e.g. NHS leadership academy training programmes). Despite these positive actions, many senior and junior doctors still lack essential leadership skills for dealing with stressful situations. This suggests that leadership training should begin in undergraduate medical education and continue throughout medical training. 13, 20 As a result, medical schools and medical councils such as the GMC in the UK need to take radical initiatives to include leadership education in undergraduate medical education.

Similarly, social support may buffer the effects of stressors on young surgeons and surgical trainees. In particular, supervisors play an important leadership role in surgery. Surgeons have several supervisors, including non-physician administrators/managers and the physician peers. ¹² Increased supervision by senior doctors is important for decreasing the risk of burnout for junior doctors. Older, more experienced physicians have been found to have lower psychological distress and burnout than younger physicians, as they have

managed to develop effective coping strategies through their years of training and practice.²¹ Therefore, senior surgeons as supervisors would be able to understand junior surgeons' stressful environment and identify more successful coping strategies for combating burnout. They could help their juniors and newcomers cultivate wellbeing.^{3, 21}

In the UK, the National Institute for Health and Care Excellence has published a guideline for promoting employee health and wellbeing. 22 Under this guideline, employers and senior leadership are responsible for creating a supportive environment enabling employees to be proactive when and if possible to protect and enhance their own health and wellbeing and for developing policies to support the workplace culture, such as respect for work-life balance. The guideline also underlines the necessity of job design that encourages employees to be flexible about work scheduling and gives employees control and flexibility over their own time. A flexible working schedule is important for retaining older employees because satisfied surgeons may wish to stay in clinical practice after

retirement when they are working closer to their desired number of hours per week and can balance their work and personal lives, whereas burnt-out surgeons tend to retire early. As a result, this guideline would be useful for healthcare employers in the UK and in other countries when combating burnout in surgeons.

Indeed, medical councils, such as the GMC in the UK, have a significant role to play in preventing and reducing burnout in surgeons, particularly during the fitness-to-practice investigation. Nevertheless, the GMC itself has a dilemma: how does it maintain the line between protecting patients and helping vulnerable surgeons? The GMC needs to conduct investigations along these lines by creating an environment where surgeons feel that they are treated 'innocent until proven guilty' while addressing the issues of stigmatization, fear of job loss and discrimination that are associated with the fitness-to-practice investigations. This suggests that medical councils must conduct these investigations in a

compassionate manner and as quickly and effectively as possible without adding more stress to already burnt-out surgeons.⁴

Conclusion

The high level of burnout in surgeons will continue to grow as continuous healthcare reforms and financial constraints imposed by governments increase personal and professional pressures on surgeons. The many possible causes of burnout in surgeons can be categorised as organisational contributors (e.g. administrative demand and long working hours) and interpersonal contributors (e.g. work-home conflict). Interventions to prevent burnout in surgeons still very much focus on individual approaches, such as stress management. Evidence suggests that organisational interventions initiated by employers in the healthcare sector (e.g. creating opportunities for flexible working hours) have longer-lasting and effective outcomes. Indeed, medical council, such as the GMC in the UK, also have a significant role to play in combating burnout in

surgeons by taking radical actions to transform medical education, reflecting the challenges in contemporary healthcare organisations.

Reference

- 1. Farber BA. Stress and burnout in the human service professions. :
 - Pergamum; 1983.
- 2. Romani M, Ashker K. Burnout among physicians. *The Libyan Journal of Medicine* 2014; 9.
- Spickard Jr A, Gabbe SG, Christensen JF. Mid-career burnout in generalist and specialist physicians. *JAMA* 2002;288(12):1447-1450.
- Horsfall S. Doctors who commit suicide while under GMC fitness to practice investigation. General Medical Council 2014.

- Upton D, Mason V, Doran B, Solowiej K, Shiralkar U, Shiralkar S. The experience of burnout across different surgical specialties in the United Kingdom: a cross-sectional survey. Surgery 2012; 151(4):493-501.
- 6. Shanafelt TD, Balch CM, Bechamps G, et al. Burnout and medical errors among American surgeons, *Annals of Surgery*, 2010, 251(6), 995-100
- Klein J, Grosse Frie K, Blum K, von dem Knesebeck O, Burnout and perceived quality of care among German clinicians in surgery,
 International Journal for Quality in Health Care 2010, 22(6), 525 –530
- 8. Halbesleben JR, Rathert C. Linking physician burnout and patient outcomes: exploring the dyadic relationship between physicians and patients. *Health Care Manage Rev* 2008 Jan-Mar;33(1):29-39
- Dewa CS, Jacobs P, Thanh NX, Loong D. An estimate of the cost of burnout on early retirement and reduction in clinical hours of practicing physicians in Canada. *BMC health services research* 2014; 14:254.

- Bagenal J, Moberly T, Godlee F. Problems with the new junior doctor contract. *BMJ* 2015 Sep 23; 351:h5077.
- 11. Balch CM, Shanafelt TD, Dyrbye L, Sloan JA, Russell TR, Bechamps GJ, et al. Surgeon Distress as Calibrated by Hours Worked and Nights on Call. J Am Coll Surg 2010; 211(5):609-619.
- 12. Sochos A, Bowers A, Kinman G. Work Stressors, Social Support, and
 Burnout in Junior Doctors: Exploring Direct and Indirect Pathways. *Journal of Employment Counseling* 2012; 49(2):62-73.
- 13. Montgomery A. The inevitability of physician burnout: Implications for interventions. *Burnout Research* 2014;1(1):50-56
- 14. Mechaber H, Levine R, Manwell L, Mundt M, Linzer M. Part-Time Physicians...Prevalent, Connected, and Satisfied. *J Gen Intern Med* 2008; 23(3):300-303.

- 15. Anderson BL, Hale RW, Salsberg E, Schulkin J. Outlook for the future of the obstetrician-gynecologist workforce. *Obstet Gynecol* 2008; 199(1):88.e1-88.e8.
- 16. British Medical Association. EuropeanWorking Time Directive. 2016

 [https://www.bma.org.uk/support-at-work/ewtd]
- 17. Antiel RM, Reed DA, Van Arendonk KJ, Wightman SC, Hall DE, Porterfield JR, et al. Effects of duty hour restrictions on core competencies, education, quality of life, and burnout among general surgery interns. JAMA surgery 2013; 148(5):448-455.
- 18. Guest R, Baser R, Li Y, Scardino P, Brown A, Kissane D. Cancer Surgeons' Distress and Well- being, II: Modifiable Factors and the Potential for Organizational Interventions. *Ann Surg Oncol* 2011; 18(5):1236-1242.

- 19. Peisah C, Latif E, Wilhelm K, Williams B. Secrets to psychological success: why older doctors might have lower psychological distress and burnout than younger doctors. *Aging Mental Health* 2009; 13(2):300-307.
- 20. The National Institute for Health and Care Excellent. Workplace health: management practices, 2016 [https://www.nice.org.uk/guidance/ng13]